Criteria Measurement Recommendations for an Urban Forestry RFP for Louisville (Version 1)

Introduction

The Tree Board sub-committee on Tree Inventory and Research met today (Sept. 4, 2012) to discuss which urban forest characteristics should be included in a planned RFP (Request for Proposal) being developed by the Tree Board Council and its various sub-committees. The purpose of the RFP is to bid out to a party or parties the collection of data to be used by the Tree Council and its sub-committee members in developing an Urban Forestry Master Plan for Louisville. Development of this Master Plan is a primary objective for the Council and underpins future Urban Forestry plans. The contribution of our sub-committee on Urban Forest Inventory and Research is to recommend a list of urban forest attributes we want to include in this RFP to be measured by the party or parties that will be awarded the contract. The following criteria and their prioritization were arrived at during the discussion that took place at today's meeting. Consider this list a starting point for further discussion as this process evolves. It would be helpful if you were to read the article, "Criteria and Indicators for Strategic Urban Forest Planning and Management" by W. A Kenney et al., which was sent as a pdf to you via email. That way we can all be working off the same "page" during our discussions. We will finalize our list in the next meeting of this sub-committee (date as yet to be determined but within a month) and submit them to Katy Schneider, co-chair of the Tree Council. If you have any questions or comments, don't hesitate to contact me via email. m.carreiro@louisville.edu

PRIORITY 1 ATTRIBUTES (Cost to be itemized separately from Priority 2 Attributes)

- 1. Measure tree canopy cover for the entire county (Metro Louisville) using latest remote imagery available
 - by Council District (2012 boundaries), and
 - by Land-Use Type (Anderson II Level Land Use: Commercial, Industrial, Residential, Transportation corridors, etc.)
- 2. Measure the *Potential* Tree Cover for the entire county (Metro Louisville) using latest remote imagery available
 - by Council District, and
 - by Land-Use Type (Anderson II Level Land Use: Commercial, Industrial, Residential, Park woodlands, Transportation corridors, etc.)
- 3. Measure the above two attributes using remote imagery from 10 years ago so as to obtain a measure of canopy cover change over time.
 - by Council District using current (2012) boundaries for these political units
 - by Land-Use Type that existed ten years previously
- 4. Locate Hot Spots of environmental need for tree cover
 - Based on tools such as maps or remote imagery, identify and prioritize locations where
 - Heat Island effects are large, particularly in residential areas, and
 - locations where flooding events due to run-off are extreme (e.g., combined sewer overflows, street flooding, creek flooding and other related problems).

PRIORITY 2 ATTRIBUTES (Cost to be itemized separately from Priority 1 Attributes)

1. Perform a subsampling of trees for the Metro Area by Land-Use Type (Anderson II level above), such as that recommended for use in the Urban Forest Effects Model by the USDA Forest Service.

This subsample should be conducted so that data by land-use type can be extrapolated to determine the species composition of the urban forest, tree population and size class distribution, tree condition, tree vulnerability to diseases and pests, and ecosystem services provided by the trees. Ecosystem services at a minimum will include net energy savings in cooling/heating homes, amount of carbon stored and sequestered by trees, and amount of air pollutants removed. Ecosystem disservices, such as tree pollen load potential (contribution to the Pollen Misery Index), should also be extrapolatable from these data.

2. Scenarios (involving estimates of tree survivorship rates in different land-use types) will be developed that estimate the number of trees that would need to be planted annually to:

prevent net loss of tree cover over a 5 year period increase tree cover to 33% and the time needed to attain that coverage increase tree cover to 40% and the time needed to attain that coverage



LOUISVILLE METRO TREE ADVISORY COMMISSION UPDATE REPORT TO THE MAYOR

August 22, 2012 (Revised 9/18/2012)

Immediate Issues:

• **Urban Heat Island** – Louisville's tree policies are "among the weakest" according to Dr. Stone's research on climate change and the 50 largest cities. His research also has Louisville at the top of the list for warming up faster than these other cities. Strategically, increasing the tree canopy is one of the most effective ways to mitigate the urban heat island effect.

Action: The Commission is advising that the Mayor adopt a "no net loss" of tree coverage.

• **Emerald Ash Borer** – Ash trees comprise approximately 13% of Louisville's tree canopy which roughly amounts to over 180,000 trees. The problem cannot be ignored and either the ash trees need to be removed before they become a threat to public safety or treated. (See attached position statement.)

Action: A committee is coming up with a plan and related costs to address this issue to be submitted to the Mayor and possibly Metro Council.

• **Staffing:** The Commission needs administrative support.

Action: APCD has offered to provide the resources to meet this need.

• **Tree Fund:** The Commission has been pursuing the creation of a 501C-3 arm to receive private contributions and fund raiser dollars. Originally, it was thought that the fund would reside at the Community Foundation of Louisville, but our research has led us to rethink this option. The costs for housing the fund there are too high and the process of setting up another 501C3 (in

addition to the Park Foundation and Brightside) supporting City activities seems unnecessarily redundant.

Action: The Commission is talking with two 501C-3 organizations about being the fiscal agent for the Fund.

• MSD Consent Decree Dollars: Some of these funds can be used for planting trees to mitigate storm water runoff. Both the Cherokee Triangle and the Parks Department have had grants approved but have yet to receive the money. Is there a plan for these dollars? Who is in charge of the process? Could some of the dollars be used to help fund the tree master plan?

Action: The Commission has asked a representative of MSD involved with the consent decree funds to speak at the next meeting.

Recommendations:

- Issue an RFP for an Urban Forest Master Plan: A first order of business for the Commission is to establish where Louisville is in terms of our tree canopy and determine where we want to go. An Urban Forest Master Plan can provide such a roadmap. The cost from \$100,000 to \$500,000 will depend on the level of data collection and analyses. Therefore, the Commission is recommending the drafting of an RFP with several levels to be put out for bid. The RFP will then serve as a funding proposal.
- **Draft a Tree Ordinance:** Louisville needs a Tree Ordinance that pulls together all tree related regulations into one place. Legal assistance possibly law students will be needed to assist with the drafting of this document.
- Adopt a "No Net Loss" Policy: A representative of the Tree Commission needs to serve on the main committee considering changes to the code and encourage a "no net loss" of tree coverage approach to any changes to the Tree Canopy requirements. (See attached policy recommendation.)
- **Hire an Urban Forester:** The most progressive cities in terms of preserving and increasing their tree canopies have at least one Urban Forester who is a certified arborist charged with managing the overall canopy. This position is not the same as the City Arborist. Following is a sample job description:

Urban Forester: an experienced Supervisor to plan, administer, and direct all functions, and provide for the efficient organization and operation of all phases, of the City Urban Forestry Program, Tree Inventory, and maintenance of the Tree City USA accreditation.

There has been some discussion about possibly splitting this position with the University of Louisville, but ideally the Commission believes that the position should be totally with Metro.